

**STRUCTURAL HEALTH MONITORING OF HISTORICAL MONUMENTS BY RAPID
VISUAL SCREENING: CASE STUDY OF BHAND DEVAL TEMPLE, ARANG,
CHHATISGARH, INDIA**

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ABSTRACT

This paper projects case study wherein rapid visual screening (RVS) is carried out which is based on seismic intensity, building type and damageability grade as observed in past earthquakes and actions are recommended which are to be implemented for Bhand Deu Temple in Arang tahsil and district Raipur located in Chhattisgarh state, India. Geo coordinates are Lat 21degrees 11 minutes and 43 seconds North and Long.81 degrees 58 minutes 10 seconds East. Popularly known as Bhand Deul ,this temple is dedicated to Jaina section as evident from three beautiful images of Tirthankaras in kayotsarga pose istalled in the sanctum. West facing temple is pancharatha on plan constructed over a raised platform. Mandapa and Mukhmandapa are not surviving above the base whereas main temple has been constructed in Nagara style. Exterior is decorated with Urusingas and niches containing images of Jain Tirthankaras Yaksha-Yakshi's, other deities and interestingly the depictions of erotic couples also. The adhisthana contains five mouldings beautifully carved with rows of elephants, horses, swans, music and dance scenes, geometric patterns and kirtimukhas etc; Stylishitically the temple is assignable to the rulers of Haihaya dynasty of 9th century A.D.

KEYWORDS: Structures, Response, Monitor, Monuments, Irregularity, Hazard, Damageability, Complexities